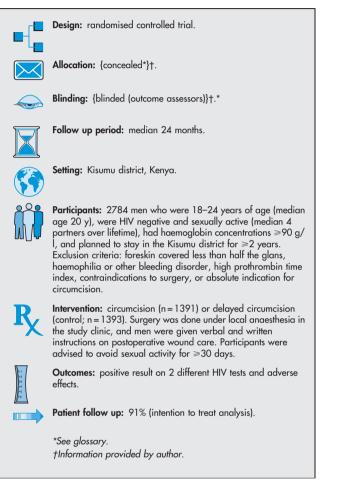
# Circumcision reduced the risk of contracting HIV infection in young sexually active Kenyan men

Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. Lancet 2007;**369**:643–56.

Clinical impact ratings GP/FP/Primary care \*\*\*\*\*\* Infectious disease \*\*\*\*\*\* Tropical & travel medicine \*\*\*\*\*\*

🔿 In young sexually active men in Kenya, does circumcision prevent the transmission of HIV infection?

## **METHODS**



#### **MAIN RESULTS**

The study was stopped early after a third interim analysis. Fewer men in the circumcision group than in the control group contracted HIV

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infection over the study period (table). Adverse effects occurred in 23 circumcised men; the most common were bleeding and infection (5 occurrences each).

### **CONCLUSION**

In young sexually active men in Kenya, circumcision reduced the risk of contracting HIV infection.

#### Commentary

The study by Bailey *et al* indicates that adult male circumcision, together with other HIV prevention interventions, reduces HIV acquisition by half. This finding confirms those of many previous observational studies<sup>1</sup> and 2 other randomised controlled trials.<sup>2-3</sup> The effect is based on a biologically plausible mechanism of action, which has been suggested by *in vitro* studies. The strong treatment effect was seen in both observational and intervention studies. The authors document this beneficial effect of circumcision despite sustained increases in self reported safer sexual behaviour, including consistent condom use.

While the Kenyan trial findings provide new options for men, an ongoing trial will examine the potential for circumcision to influence the probability of HIV transmission to women from infected men.

The low rate of adverse events related to circumcision, as performed in a well equipped centre, suggests what may be achieved. A critical aspect of developing public health programmes that include circumcision will be the ability to provide suitable surgical care. Bailey *et al* speculate whether the higher rates of adverse events observed in another randomised trial in South Africa, in which general practitioners used the same surgical technique in their offices,<sup>3</sup> may have been a function of the surgical setting and aftercare.

The finding that circumcision was only partially efficacious also indicates that this cannot be seen as a stand-alone intervention but will need thoughtful and sustainable integration into existing prevention approaches.

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- Siegfried N, Muller M, Volmink J, et al. Male circumcision for prevention of heterosexual acquisition of HIV in men. Cochrane Database Syst Rev 2003;(3):CD003362.
- 2 Gray RH, Kigozi G, Serwadda D, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. Lancet 2007;369:657–66.
- 3 Auvert B, Taljaard D, Lagarde E, et al. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. PLoS Med 2005;2:e298.

 Circumcision v delayed circumcision (control) in young sexually active Kenyan men\*

 Outcomes at median 24 months
 Circumcision
 Control
 RR (95% Cl)
 NNT (Cl)

 HIV infection
 2.1%
 4.1%
 53% (22 to 72)
 45 (34 to 109)

 \*Abbreviations defined in glossary; RRR, NNT, and Cl calculated from data in article.